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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/718,057	11/20/2003	Nicholas McMahon Turner	048717.00002	9305

7590 03/22/2007  
James E. Bradley  
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EXAMINER
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NASSER, ROBERT L

ART UNIT	PAPER NUMBER
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3735

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/22/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

## Office Action Summary

Application No.

10/718,057

Applicant(s)

TURNER ET AL.

Examiner

Robert L. Nasser

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 16 December 1006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,2,8,10-12,14 and 18-33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,8,12,14 and 18-33 is/are rejected.
- 7) ☒ Claim(s) 10 and 11 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 8, 12, 14, 18, 23, 24, 25, 26, and 31-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Villafana 5487760 in view of McLaughlin et al 2003/0163055 and Gazdzinski 2001/0051766. Villafana shows a heart valve that includes a sensor 52 and a telemetric communication device 50 for transmitting data telemetrically to a remote device. The pressure sensor is not a piezoelectric sensor with a polymeric sensing area. McLaughlin teaches that a PVDF piezoelectric sensor is a known pressure sensor (see paragraph [0063]). Hence, it would have been obvious to modify Villafana to use such a piezoelectric sensor, as it is merely the substitution of one known sensor for another. Villafana uses rf signals to communicate wirelessly, but it does not state that it uses an rfid tag. Gazdzinski teaches that an rfid tag is a known rf communication technique for implantable devices. Hence, it would have been obvious to modify Villafana to use an rfid tag, as it is merely the substitution of one known equivalent communication device for another. Claim 8 is rejected in that the examiner notes that applicant has not stated that making the using an integrated circuit for the telemetry device is for a specific purpose or that it solves a stated problem. As such, to select a IC telemetry device would have merely been a matter of design choice for one skilled in the art. Claims 12 and 14 are rejected in that as the sensor of Villafana is a pressure sensor, it will sense acoustic signals, as it a pressure

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wave. Claim 23 is rejected in that Villafana is a mechanical valves. Claim 24 is rejected in that Villafana has the remote device 62. Claim 25 is rejected in that the remote device powers the valve. Claim 26 is rejected in that the remote device stores the data. Claim 28 is rejected in that the modem is a data transmission means. Claims 31-33 are rejected for the reasons given above.

Claims 19, 20, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Villafana in view of McLaughlin et al and Gazdzinski, as applied to claims 1, 2, 8, 12, 14, 18, 23, 24, 25, 26, and 31-33 above, further in view of Navia et al 5156621. Villafana teaches in column 2, line 28, that the valve of the invention can be a tissue valve. It does not give the structure of a tissue valve. Navia et al shows a tissue valve where the valve wall is made of tissue. Hence, it would have been obvious to modify Villafana to use the valve of Navia, as it is merely the selection of a known tissue valve in the art. Claim 20 is rejected in that the sensor and transceiver of the combination are inside of a cover (see Villafana figure 2). Claim 22 is rejected in that the valve of Navia is stentless.

Claims 19, 20, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Villafana in view of McLaughlin et al and Gazdzinski, as applied to claims 1, 2, 8, 12, 14, 18, 23, 24, 25, 26, and 31-33 above, further in view of Alonso 5032128. Villafana teaches in column 2, line 28, that the valve of the invention can be a tissue valve. It does not give the structure of a tissue valve. Alonso et al shows a tissue valve where the valve wall is made of tissue. Hence, it would have been obvious to modify Villafana to use the valve of Alonso, as it is merely the selection of a known

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tissue valve in the art. Claim 20 is rejected in that the sensor and transceiver of the combination are inside of a cover (see Villafana figure 2). Claim 22 is rejected in that the valve of Alonso has a stent.

Claims 27-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Villafana in view of McLaughlin et al and Gazdzinski, as applied to claims 1, 2, 8, 12, 14, 18, 23, 24, 25, 26, and 31-33 above, further in view of Lai et al 5,855,580. Claim 27 is rejected in that Lai teaches doing some of the analysis at the remote station. Hence, it would have been obvious to modify the combination above to do the processing at the remote location, to simplify the implantable device. Claims 28 is rejected in that the remote device has its own data transmission means, i.e. it is a two way data link. Claims 29 and 30 are rejected in that the central station 14 stores data on a floppy disk (see column 4, lines 1-16). As such, it would have been obvious to modify the combination above to use both the communication means and the storage device, to improve the overall functioning of the processing station.

Claims 10 and 11 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims. Claims 10 and 11 are allowable in that none of the art of record has the spaced art sensors, as claimed.

Applicant's arguments filed 12/18/2006 have been fully considered but they are moot in view of the new grounds of rejection.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

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§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert L. Nasser whose telephone number is 571 272-4731. The examiner can normally be reached on m-f 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Marmor II can be reached on 571 272-4730. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Robert L. Nasser  
Primary Examiner  
Art Unit 3735

RLN  
March 17, 2007

*Robert L. Nasser*

RECEIVED  
MAR 17 2007